

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH UNIVERSITY, MS
AGENCY ADDRESS

DANIEL W. JONES, CHANCELLOR
CHIEF EXECUTIVE OFFICER

	Actual Expenses FY Ending June 30, 2011	Estimate Expenses FY Ending June 30, 2012	Requested for FY Ending June 30, 2013	Requested Increase (+) or Decrease (-) FY 2013 vs. FY 2012 (Col. 3 vs. Col. 2)	
				AMOUNT	PERCENT
I. A. PERSONAL SERVICES					
1. Salaries, Wages & Fringe Benefits (Base)	271,221	370,679	370,679		
a. Additional Compensation			17,420		
b. Proposed Vacancy Rate (Dollar Amount)					
c. Per Diem					
Total Salaries, Wages & Fringe Benefits	271,221	370,679	388,099	17,420	4.69%
2. Travel					
a. Travel & Subsistence (In-State)	895	3,000	3,000		
b. Travel & Subsistence (Out-of-State)	14,105	17,000	17,000		
c. Travel & Subsistence (Out-of-Country)					
Total Travel	15,000	20,000	20,000		
B. CONTRACTUAL SERVICES (Schedule B):					
a. Tuition, Rewards & Awards					
b. Communications, Transportation & Utilities	9	150	150		
c. Public Information	217	500	500		
d. Rents	500	500	500		
e. Repairs & Service					
f. Fees, Professional & Other Services	416	500	500		
g. Other Contractual Services	750	750	750		
h. Data Processing	74,108	87,600	87,600		
i. Other					
Total Contractual Services	76,000	90,000	90,000		
C. COMMODITIES (Schedule C):					
a. Maintenance & Construction Materials & Supplies					
b. Printing & Office Supplies & Materials	540	2,500	2,500		
c. Equipment, Repair Parts, Supplies & Accessories	828	2,500	3,500	1,000	40.00%
d. Professional & Scientific Supplies & Materials					
e. Other Supplies & Materials	1,732	4,000	4,000		
Total Commodities	3,100	9,000	10,000	1,000	11.11%
D. CAPITAL OUTLAY:					
1. Total Other Than Equipment (Schedule D-1)					
2. Equipment (Schedule D-2):					
b. Road Machinery, Farm & Other Working Equipment					
c. Office Machines, Furniture, Fixtures & Equipment					
d. IS Equipment (Data Processing & Telecommunications)	282,100	125,380	236,296	110,916	88.46%
e. Equipment - Lease Purchase					
f. Other Equipment					
Total Equipment (Schedule D-2)	282,100	125,380	236,296	110,916	88.46%
3. Vehicles (Schedule D-3)					
4. Wireless Comm. Devices (Schedule D-4)					
E. SUBSIDIES, LOANS & GRANTS (Schedule E):	80,240	76,219	92,380	16,161	21.20%
TOTAL EXPENDITURES	727,661	691,278	836,775	145,497	21.04%
II. BUDGET TO BE FUNDED AS FOLLOWS:					
Cash Balance-Unencumbered					
General Fund Appropriation (Enter General Fund Lapse Below)	727,661	691,278	836,775	145,497	21.04%
State Support Special Funds					
Federal Funds _____ Other Special Funds (Specify) _____					
Less: Estimated Cash Available Next Fiscal Period					
TOTAL FUNDS (equals Total Expenditures above)	727,661	691,278	836,775	145,497	21.04%
GENERAL FUND LAPSE					
III. PERSONNEL DATA					
Number of Positions Authorized in Appropriation Bill	a.) Full Perm	6	6	7	1
	b.) Full T-L				
	c.) Part Perm.				
	d.) Part T-L				
Average Annual Vacancy Rate (Percentage)	a.) Full Perm				
	b.) Full T-L				
	c.) Part Perm.				
	d.) Part T-L				

Approved by: _____
 Official of Board or Commission
 Budget Officer: Pamela K. Roy / proym@olemiss.edu
 Phone Number: 662-915-5019

Submitted by: _____
 Name
 Title: CHANCELLOR
 Date: July 26, 2011

REQUEST BY FUNDING SOURCE

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2011 Actual Amount	% Of Line Item	% Of Total Budget	FY 2012 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2013 Requested Amount	% Of Line Item	% Of Total Budget
1. General State Support Special (Specify)	271,221	100.00%		370,679	100.00%		388,099	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
Total Salaries	271,221		37.27%	370,679		53.62%	388,099		46.38%
1. General State Support Special (Specify)	15,000	100.00%		20,000	100.00%		20,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
Total Travel	15,000		2.06%	20,000		2.89%	20,000		2.39%
1. General State Support Special (Specify)	76,000	100.00%		90,000	100.00%		90,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
Total Contractual	76,000		10.44%	90,000		13.01%	90,000		10.75%
1. General State Support Special (Specify)	3,100	100.00%		9,000	100.00%		10,000	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
Total Commodities	3,100		0.42%	9,000		1.30%	10,000		1.19%

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2011 Actual Amount	% Of Line Item	% Of Total Budget	FY 2012 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2013 Requested Amount	% Of Line Item	% Of Total Budget
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
Total Other Than Equipment									
1. General _____ State Support Special (Specify) _____	282,100	100.00%		125,380	100.00%		236,296	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
Total Equipment	282,100		38.76%	125,380		18.13%	236,296		28.23%
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
Total Vehicles									
1. General _____ State Support Special (Specify) _____									
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal _____ Other Special (Specify) _____									
9.									
10.									
11.									
12.									
Total Wireless Comm. Devices									

REQUEST BY FUNDING SOURCE

Name of Agency UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Specify Funding Sources As Shown Below	FY 2011 Actual Amount	% Of Line Item	% Of Total Budget	FY 2012 Estimated Amount	% Of Line Item	% Of Total Budget	FY 2013 Requested Amount	% Of Line Item	% Of Total Budget
1. General State Support Special (Specify)	80,240	100.00%		76,219	100.00%		92,380	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
Total Subsidies, Loans & Grants	80,240		11.02%	76,219		11.02%	92,380		11.04%
1. General State Support Special (Specify)	727,661	100.00%		691,278	100.00%		836,775	100.00%	
2. Budget Contingency Fund									
3. Education Enhancement Fund									
4. Health Care Expendable Fund									
5. Tobacco Control Fund									
6. ARRA - Education, Disc., FMAP									
7. Hurricane Disaster Reserve Fund									
8. Federal Other Special (Specify)									
9.									
10.									
11.									
12.									
TOTAL	727,661		100.00%	691,278		100.00%	836,775		100.00%

SPECIAL FUNDS DETAIL

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
Name of Agency

S. STATE SUPPORT SPECIAL FUNDS		(1) Actual Revenues FY 2011	(2) Estimated Revenues FY 2012	(3) Requested Revenues FY 2013
Source (Fund Number)	Detailed Description of Source			
	Cash Balance-Unencumbered			
Budget Contingency Fund	BCF - Budget Contingency Fund			
Education Enhancement Fund	EEF - Education Enhancement Fund			
Health Care Expendable Fund	HCEF - Health Care Expendable Fund			
Tobacco Control Fund	TCF - Tobacco Control Fund			
ARRA - Education, Discretionary, FMAP	ARRA - Education, Discretionary, FMAP			
Hurricane Disaster Reserve Fund	HDRF - Hurricane Disaster Reserve Fund			
Section S TOTAL				

A. FEDERAL FUNDS*		Percentage Match Requirement		(1) Actual Revenues FY 2011	(2) Estimated Revenues FY 2012	(3) Requested Revenues FY 2013
Source (Fund Number)	Detailed Description of Source	FY 2012	FY 2013			
	Cash Balance-Unencumbered					
Section A TOTAL						

B. OTHER SPECIAL FUNDS (NON-FED'L)		(1) Actual Revenues FY 2011	(2) Estimated Revenues FY 2012	(3) Requested Revenues FY 2013
Source (Fund Number)	Detailed Description of Source			
	Cash Balance-Unencumbered			
Section B TOTAL				

Section S + A + B TOTAL				
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C. TREASURY FUND/BANK ACCOUNTS*			(1) Reconciled Balance as of 6/30/11	(2) Balance as of 6/30/12	(3) Balance as of 6/30/13
Name of Fund/Account	Fund/Account Number	Name of Bank (If Applicable)			

* Any non-federal funds that have restricted uses must be identified and narrative of restrictions attached.

**NARRATIVE OF SPECIAL FUNDS DETAIL
AND TREASURY FUND/BANK ACCOUNTS**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

CONTINUATION AND EXPANDED REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
AGENCY

Program No. _____ of _____ Programs

SUMMARY OF ALL PROGRAMS

PROGRAM

	FY 2011 Actual				
	(1) General	(2) State Support Special	(3) Federal	(4) Other Special	(5) Total
Salaries, Wages, Fringe	271,221				271,221
Travel	15,000				15,000
Contractual Services	76,000				76,000
Commodities	3,100				3,100
Other Than Equipment					
Equipment	282,100				282,100
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	80,240				80,240
Total	727,661				727,661
No. of Positions (FTE)	5.22				5.22

	FY 2012 Estimate				
	(6) General	(7) State Support Special	(8) Federal	(9) Other Special	(10) Total
Salaries, Wages, Fringe	370,679				370,679
Travel	20,000				20,000
Contractual Services	90,000				90,000
Commodities	9,000				9,000
Other Than Equipment					
Equipment	125,380				125,380
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	76,219				76,219
Total	691,278				691,278
No. of Positions (FTE)	5.83				5.83

	FY 2013 Increase/Decrease for Continuation				
	(11) General	(12) State Support Special	(13) Federal	(14) Other Special	(15) Total
Salaries, Wages, Fringe	17,420				17,420
Travel					
Contractual Services					
Commodities	1,000				1,000
Other Than Equipment					
Equipment	110,916				110,916
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	16,161				16,161
Total	145,497				145,497
No. of Positions (FTE)	1.00				1.00

Note: FY2013 Total Request = FY2012 Estimated + FY2013 Incr(Decr) for Continuation + FY2013 Expansion/Reduction of Existing Activities + FY2013 New Activities.

CONTINUATION AND EXPANDED REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
AGENCY

Program No. _____ of ____1____ Programs

SUMMARY OF ALL PROGRAMS

PROGRAM

	FY 2013 Expansion/Reduction of Existing Activities				
	(16) General	(17) State Support Special	(18) Federal	(19) Other Special	(20) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
Total					
No. of Positions (FTE)					

	FY 2013 New Activities				
	(21) General	(22) State Support Special	(23) Federal	(24) Other Special	(25) Total
Salaries, Wages, Fringe					
Travel					
Contractual Services					
Commodities					
Other Than Equipment					
Equipment					
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants					
Total					
No. of Positions (FTE)					

	FY 2013 Total Request				
	(26) General	(27) State Support Special	(28) Federal	(29) Other Special	(30) Total
Salaries, Wages, Fringe	388,099				388,099
Travel	20,000				20,000
Contractual Services	90,000				90,000
Commodities	10,000				10,000
Other Than Equipment					
Equipment	236,296				236,296
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	92,380				92,380
Total	836,775				836,775
No. of Positions (FTE)	6.83				6.83

Note: FY2013 Total Request = FY2012 Estimated + FY2013 Incr(Decr) for Continuation + FY2013 Expansion/Reduction of Existing Activities + FY2013 New Activities.

**SUMMARY OF PROGRAMS
FORM MBR-1-03sum**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

FUNDING REQUESTED FISCAL YEAR 2013

PROGRAM	GENERAL	ST.SUPP.SPECIAL	FEDERAL	OTHER SPECIAL	TOTAL
1. ACADEMIC SUPPORT	836,775				836,775
SUMMARY OF ALL PROGRAMS	836,775				836,775

CONTINUATION AND EXPANDED REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
AGENCY

Program No. 1 of 1 Programs

ACADEMIC SUPPORT

PROGRAM

	FY 2011 Actual				
	(1) General	(2) State Support Special	(3) Federal	(4) Other Special	(5) Total
Salaries, Wages, Fringe	271,221				271,221
Travel	15,000				15,000
Contractual Services	76,000				76,000
Commodities	3,100				3,100
Other Than Equipment					
Equipment	282,100				282,100
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	80,240				80,240
Total	727,661				727,661
No. of Positions (FTE)	5.22				5.22

	FY 2012 Estimate				
	(6) General	(7) State Support Special	(8) Federal	(9) Other Special	(10) Total
Salaries, Wages, Fringe	370,679				370,679
Travel	20,000				20,000
Contractual Services	90,000				90,000
Commodities	9,000				9,000
Other Than Equipment					
Equipment	125,380				125,380
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	76,219				76,219
Total	691,278				691,278
No. of Positions (FTE)	5.83				5.83

	FY 2013 Increase/Decrease for Continuation				
	(11) General	(12) State Support Special	(13) Federal	(14) Other Special	(15) Total
Salaries, Wages, Fringe	17,420				17,420
Travel					
Contractual Services					
Commodities	1,000				1,000
Other Than Equipment					
Equipment	110,916				110,916
Vehicles					
Wireless Comm. Devs.					
Subsidies, Loans & Grants	16,161				16,161
Total	145,497				145,497
No. of Positions (FTE)	1.00				1.00

Note: FY2013 Total Request = FY2012 Estimated + FY2013 Incr(Decr) for Continuation + FY2013 Expansion/Reduction of Existing Activities + FY2013 New Activities.

CONTINUATION AND EXPANDED REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Program No. 1 of 1 Programs

AGENCY

ACADEMIC SUPPORT

PROGRAM

FY 2013 Expansion/Reduction of Existing Activities				
(16) General	(17) State Support Special	(18) Federal	(19) Other Special	(20) Total
Salaries, Wages, Fringe				
Travel				
Contractual Services				
Commodities				
Other Than Equipment				
Equipment				
Vehicles				
Wireless Comm. Devs.				
Subsidies, Loans & Grants				
Total				
No. of Positions (FTE)				

FY 2013 New Activities				
(21) General	(22) State Support Special	(23) Federal	(24) Other Special	(25) Total
Salaries, Wages, Fringe				
Travel				
Contractual Services				
Commodities				
Other Than Equipment				
Equipment				
Vehicles				
Wireless Comm. Devs.				
Subsidies, Loans & Grants				
Total				
No. of Positions (FTE)				

FY 2013 Total Request				
(26) General	(27) State Support Special	(28) Federal	(29) Other Special	(30) Total
Salaries, Wages, Fringe	388,099			388,099
Travel	20,000			20,000
Contractual Services	90,000			90,000
Commodities	10,000			10,000
Other Than Equipment				
Equipment	236,296			236,296
Vehicles				
Wireless Comm. Devs.				
Subsidies, Loans & Grants	92,380			92,380
Total	836,775			836,775
No. of Positions (FTE)	6.83			6.83

Note: FY2013 Total Request = FY2012 Estimated + FY2013 Incr(Decr) for Continuation + FY2013 Expansion/Reduction of Existing Activities + FY2013 New Activities.

PROGRAM DECISION UNITS

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

1 - ACADEMIC SUPPORT

AGENCY

PROGRAM NAME

	A	B	C	D	E	F	G	H
	FY 2012 Appropriation	Escalations By DFA	Non-Recurring Items	Restoration	Total Funding Change	FY 2013 Total Request		
EXPENDITURES:								
SALARIES	370,679			17,420	17,420	388,099		
GENERAL	370,679			17,420	17,420	388,099		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
TRAVEL	20,000					20,000		
GENERAL	20,000					20,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
CONTRACTUAL	90,000					90,000		
GENERAL	90,000					90,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
COMMODITIES	9,000			1,000	1,000	10,000		
GENERAL	9,000			1,000	1,000	10,000		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
CAPITAL-OTE								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
EQUIPMENT	125,380			110,916	110,916	236,296		
GENERAL	125,380			110,916	110,916	236,296		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
VEHICLES								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
WIRELESS DEV								
GENERAL								
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
SUBSIDIES	76,219			16,161	16,161	92,380		
GENERAL	76,219			16,161	16,161	92,380		
ST.SUP.SPECIAL								
FEDERAL								
OTHER								
TOTAL	691,278			145,497	145,497	836,775		

FUNDING:

GENERAL FUNDS	691,278			145,497	145,497	836,775		
ST.SUP.SPCL.FUNDS								
FEDERAL FUNDS								
OTHER SP.FUNDS								
TOTAL	691,278			145,497	145,497	836,775		

POSITIONS:

GENERAL FTE	5.83			1.00	1.00	6.83		
ST.SUP.SPCL.FTE								
FEDERAL FTE								
OTHER SP FTE								
TOTAL FTE	5.83			1.00	1.00	6.83		

PRIORITY LEVEL:

				1				
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PROGRAM NARRATIVE

Program Data Collected in Accordance with the
Mississippi Performance Budget and Strategic Planning Act of 1994
(To Accompany Form MBR-1-03)

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

1 - ACADEMIC SUPPORT

AGENCY NAME

PROGRAM NAME

I. Program Description:

The MCSR (Supercomputer) provides to all faculty, students, and staff at all state-supported institutions governed by the Board of Trustees of Institutions of Higher Learning the following:

- (1) Access to high-performance, shared-memory supercomputers, distributed memory cluster computers, and hybrid systems
- (2) Access to appropriate software, including scientific/applications software, compilers, and utilities
- (3) Access to technical assistance and instruction as required by students and faculty

II. Program Objective:

The MCSR objective is to provide a computational resource for research and instruction; to run that resource as effectively, efficiently, and securely as possible; and to provide the high level of technical assistance required to facilitate the winning of highly competitive research grants, the completion of graduate thesis and dissertation research, and the graduation of students who are prepared to compete for high tech jobs.

III. Current program activities as supported by the funding in Columns 6-15 (FY 12 Estimated & FY 13 Increase/Decrease for continuations) of MBR-1-03 and designated Budget Unit Decisions columns of MBR-1-03-A:**(D) Restoration:**

The request reflects an increase of \$145,497. Most of this increase is for upgrading the supercomputing equipment to be used by researchers. There are also increases of \$16,161 for increased utility costs; \$1,000 for purchase of additional commodities, including basic office supplies and software; and \$17,420 to hire two additional student workers to provide low-cost support and training for researchers.

PROGRAM PERFORMANCE INDICATORS AND MEASURES
Program Data Collected in Accordance with the Mississippi Performance Budget and Strategic
Planning Act of 1994

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

1 - ACADEMIC SUPPORT

AGENCY NAME

PROGRAM NAME

PROGRAM OUTPUTS: (This is the measure of the process necessary to carry out the goals and objectives of this program. This is the volume produced, i.e., how many people served, how many documents generated.)

	FY 2011 <u>ACTUAL</u>	FY 2012 <u>ESTIMATED</u>	FY 2013 <u>PROJECTED</u>
1 Central Processing Hours Generated, All Systems	4,191,570.00	6,000,000.00	8,000,000.00
2 Batch Jobs Processed, All Systems	257,961.00	80,000.00	100,000.00
3 Number of New Research Accounts Added	316.00	200.00	200.00
4 Funded Research Supported by MCSR (\$s)	14,416,633.00	15,000,000.00	15,000,000.00
5 Number of University Courses Supported with MCSR Resources	4.00	8.00	8.00
6 Number of Students & Faculty Trained at MCSR Workshops	88.00	250.00	300.00
7 Total Amount of Federal Grants, Contracts, & Allocations Requested for MCSR by IHLs in Submitted Applications	324,181.00	500,000.00	1,000,000.00
8 Total Amount of Federal Grants, Contracts, & Allocations Released to (or spent for) MCSR from Grant Awards to IHLs	273,427.00	250,000.00	250,000.00
9 Total Amount of Federal Grants, Contracts, & Allocations Requested for MS IHLs in Proposals Submitted in Collaboration with MCSR	426,596.00	2,000,000.00	3,000,000.00

PROGRAM EFFICIENCIES: (This is the measure of the cost, unit cost or productivity associated with a given outcome or output. This measure indicates linkage between services and funding, i.e., cost per investigation, cost per student or number of days to complete investigation.)

	FY 2011 <u>ACTUAL</u>	FY 2012 <u>ESTIMATED</u>	FY 2013 <u>PROJECTED</u>
1 Cost per CPU Hour - All Systems	0.17	0.12	0.10
2 Return of Investment to Mississippi (\$'s Research Grants/\$'s MCSR Budget)	19.81	21.00	18.00

PROGRAM OUTCOMES: (This is the measure of the quality or effectiveness of the services provided by this program. This measure provides an assessment of the actual impact or public benefit of your agency's actions. This is the results produced, i.e., increased customer satisfaction by xx% within a 12-month period, reduce the number of traffic fatalities due to drunk drivers within a 12-month period.)

	FY 2011 <u>ACTUAL</u>	FY 2012 <u>ESTIMATED</u>	FY 2013 <u>PROJECTED</u>
1 To continue to provide access to well-maintained high performance computing systems (xx%)	100.00	100.00	100.00
2 To continue to provide the applications software and compilers requested by MCSR users (xx%)	100.00	100.00	100.00
3 To continue to provide access to highly-qualified technical staff for assistance and instruction	100.00	100.00	100.00

PROGRAM 3% GENERAL FUND REDUCTION AND NARRATIVE EXPLANATION

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

	Fiscal Year 2012 Funding			FY 2012 GF PERCENT REDUCED
	Total Funds	Reduced Amount	Reduced Funding Amount	
Program Name: (1) ACADEMIC SUPPORT				
GENERAL	691,278	(20,738)	670,540	(2.99%)
ST.SUPPORT SPECIAL				
FEDERAL				
OTHER SPECIAL				
TOTAL	691,278	(20,738)	670,540	
Narrative Explanation: Out of state travel to be reduced by \$2,000. Commodities also to be reduced by \$2,000. Subsidies to be reduced by \$2,287. Purchases of new supercomputing equipment to be reduced by \$14,451.				
SUMMARY OF ALL PROGRAMS				
GENERAL	691,278	(20,738)	670,540	(2.99%)
ST.SUPPORT SPECIAL				
FEDERAL				
OTHER SPECIAL				
TOTAL	691,278	(20,738)	670,540	

Board of Trustees of Institutions of Higher Learning MEMBERS

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Agency

A. Explain Rate and manner in which board members are reimbursed:

Board members are reimbursed through the Institutions of Higher Learning System Administration budget with a per diem of \$40 plus expenses.

B. Estimated number of meetings FY2012

12 (twelve)

C.	Names of Members	City, Town, Residence	Appointed By	Date of Appointment	Length of Term
1.	<u>Dr. L. Stacy Davidson, Jr.</u>	<u>Cleveland, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
2.	<u>Dr. Bettye Neely</u>	<u>Grenada, MS</u>	<u>Musgrove</u>	<u>June 2000</u>	<u>12 years</u>
3.	<u>Mr. Scott Ross</u>	<u>West Point, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
4.	<u>Ms. Amy Whitten</u>	<u>Oxford, MS</u>	<u>Musgrove</u>	<u>May 2000</u>	<u>12 years</u>
5.	<u>Mr. Ed Blakeslee</u>	<u>Gulfport, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
6.	<u>Mr. Bob Owens</u>	<u>Terry, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
7.	<u>Mr. Aubrey Patterson</u>	<u>Tupelo, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
8.	<u>Ms. Robin Robinson</u>	<u>Laurel, MS</u>	<u>Barbour</u>	<u>May 2004</u>	<u>11 years</u>
9.	<u>Mr. Alan W. Perry</u>	<u>Jackson, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
10.	<u>Ms. Christine L. Pickering</u>	<u>Biloxi, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
11.	<u>Mr. C.D. Smith, Jr.</u>	<u>Meridian, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>
12.	<u>Dr. Douglas W. Rouse</u>	<u>Hattiesburg, MS</u>	<u>Barbour</u>	<u>May 2008</u>	<u>10 years</u>

Identify Statutory Authority (Code Section or Executive Order Number)*

Constitutional Amendment 213A of the Constitution of the State of Mississippi

*If Executive Order, please attach copy.

**SCHEDULE B
CONTRACTUAL SERVICES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013
A. TUITION, REWARDS & AWARDS (61010-61099)			
61010 Tuition			
61020 Employee Training			
TOTAL (A)			
B. TRANSPORTATION & UTILITIES (61100-61299)			
61110 Postage, Box Rent, etc.		50	50
611XX Transportation of Goods (61180-61190)	9	100	100
61210 Electricity			
61220 Gas			
61230 Water & Sewage			
TOTAL (B)	9	150	150
C. PUBLIC INFORMATION ((61300-61399)			
61310 Advertising & Public Information	217	500	500
61340 Signs & Billboards			
61350 Exhibits & Displays			
TOTAL (C)	217	500	500
D. RENTS (61400-61499)			
61420 Building & Floor Space			
61430 Land			
61440 Office Equipment			
61460 Other Equipment			
61470 Capitol Facilities - Rental			
61480 Exhibits, Displays & Conference Rooms	500	500	500
TOTAL (D)	500	500	500
E. REPAIRS & SERVICES (61500-61599)			
61500 Grounds, Walks, Fences & Lots			
61520 Buildings			
61530 Machinery & Field Equipment			
61540 Motor Vehicles			
61550 Office Equipment & Furniture			
61580 Shop Equipment			
61590 Miscellaneous Items of Equipment			
TOTAL (E)			
F. FEES, PROFESSIONAL & OTHER SERVICES (61600-61699)			
61610 Engineering			
61615 SAAS Fees - DFA			
61616 MMRS Fees			
61620 Department of Audit			
6162X Accounting (61621-61624)			
6163X Legal (61630-61636)			
6164X Medical Services (61640-61646)			
61650 State Personnel Board			
6165X Personnel Services Contracts (61651-61653)			
61658 Personnel Services Contracts - SPAHRS			
6166X Court Costs & Reporters (61661-61666)			
61670 Laboratory & Testing Fees			
6168X Contract Worker (61682-61688)			
61690 Other Fees & Services	416	500	500

**SCHEDULE B
CONTRACTUAL SERVICES CONTINUED**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013
TOTAL (F)	416	500	500
G. OTHER CONTRACTUAL SERVICES (61700-61899)			
61700 Liability Insurance Pool Contributions (Tort Claims)			
61710 Insurance & Fidelity Bonds			
61715 Insurance Computer Equipment			
61720 Membership Dues	750	750	750
61721 Subscriptions			
TOTAL (G)	750	750	750
H. INFORMATION TECHNOLOGY (61900-61990)			
61902 IS Professional Fees - Outside Vendor		1,500	1,500
61905 IS Professional Fees - ITS			
6191X IS Training/Education (61914-61915)			
61917 Service Charges to State Data Center			
61918 Data Entry			
61921 Software Acquisition and Installation		10,000	10,000
61922 Basic Telephone Monthly - Outside Vendor	3,347	3,500	3,500
61923 Basic Telephone Monthly - ITS			
61924 Long Distance Charges - Outside Vendor	1	600	600
61925 Long Distance Charges - ITS			
61926 Private Data Line Monthly Charges - Outside Vendor			
61927 Private Data Line Monthly Charges - ITS			
61928 Public Network Access Charges - Outside Vendor	952	1,000	1,000
61929 Public Network Access Charges - ITS			
6193X IS Related Rentals (61932-61933)			
61938 Pager Usage Time - Outside Vendor			
61939 Cellular Usage Time - Outside Vendor			
61961 Maintenance/Repair of IS Equipment	4,064	1,000	1,000
61962 Maintenance/Repair of Telephone Systems (ITS)			
61980 Software Maintenance, Outside Vendor	65,744	70,000	70,000
TOTAL (H)	74,108	87,600	87,600
I. OTHER (61991-61999)			
6199X Prior Year Expense (61996-61998)			
61999 Contractual Services - No PO Required			
TOTAL (I)			
GRAND TOTAL <i>(Enter on Line I-B of Form MBR-1)</i>	76,000	90,000	90,000
FUNDING SUMMARY:			
GENERAL FUNDS	76,000	90,000	90,000
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
TOTAL FUNDS	76,000	90,000	90,000

**SCHEDULE C
COMMODITIES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013
A. MAINTENANCE & CONSTR. MATERIALS & SUPPLIES (62010-62099)			
62040 Lumber Parts			
62050 Steel & Other Metals			
62060 Paints			
Total (A)			
B. PRINTING & OFFICE SUPPLIES & MATERIALS (62100-62199)			
62110 Printing Binding	249	1,500	1,500
62120 Duplication & Reproduction Supplies			
62130 Office Supplies & Materials	291	1,000	1,000
62140 Paper Supplies			
62150 Maps, Manuals, Library Books			
62160 Office Equipment (not capital outlay)			
Total (B)	540	2,500	2,500
C. EQUIPMENT REPAIR PARTS, SUPPLIES & ACCES. (62200-62299)			
62210 Fuels - Gasoline			
62251 Repair Vehicle			
62270 Radio & TV Supply & Repair			
62271 Repair of Comm Systems, Parts			
62290 Other Equipment Repair Parts			
62555 IT Repair Parts for Equipment	828	2,500	3,500
Total (C)	828	2,500	3,500
D. PROFESSIONAL & SCI. SUPPLIES AND MATERIALS (62300-62399)			
62330 Photographic Supplies			
62340 Drugs & Chemicals - Medical & Lab Use			
62390 Other Professional Scientific			
Total (D)			
E. OTHER SUPPLIES & MATERIALS (62400-62999)			
62420 Hardware, Plumbing & Electrical			
62450 Janitor Supplies & Cleaning			
62460 Wearing Material			
62470 Food	1,732	1,000	1,000
62520 Decal Signs			
62530 Uniforms & Wearing Apparel			
62560 Eating Utensils			
62590 Other Supplies & Materials		3,000	3,000
62595 Other Equipment (less than \$1,000)			
62998 Prior year expense			
Total (E)	1,732	4,000	4,000
GRAND TOTAL (A, B, C, D & E) <i>(Enter on Line I-C of Form MBR-1)</i>	3,100	9,000	10,000
FUNDING SUMMARY:			
GENERAL FUNDS	3,100	9,000	10,000
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
TOTAL FUNDS	3,100	9,000	10,000

**SCHEDULE D-1
CAPITAL OUTLAY
OTHER THAN EQUIPMENT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013
A. LANDS (63100-63199)			
63110 Land for Buildings			
63120 Land for Right-of-Way			
63130 Land for Aggregates			
63170 Land Purchased for Other Purposes			
TOTAL (A)			
B. BUILDINGS & IMPROVEMENTS (63200-63299)			
63250 Buildings - Purchased, Constructed, Remodeled			
TOTAL (B)			
C. INFRASTRUCTURE & OTHER (63500-63999)			
635XX Other			
TOTAL (C)			
GRAND TOTAL <i>(Enter on Line I-D-1 of Form MBR-1)</i>			
FUNDING SUMMARY:			
GENERAL FUNDS			
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
TOTAL FUNDS			

**SCHEDULE D-2
CAPITAL OUTLAY EQUIPMENT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

EQUIPMENT BY ITEM	Act. FY Ending June 30, 2011		Est. FY Ending June 30, 2012		Req. FY Ending June 30, 2013		
	No. of Units	Total Cost	No. of Units	Total Cost	No. of Units	Cost Per Unit	Total Cost
A. VEHICLES (see form MBR-1-D-3)							
B. ROAD MACHINERY, FARM & OTHER EQUIPMENT							
63320 Road Machinery							
TOTAL (B)							
C. OFFICE MACHINES, FURNITURE, FIXTURES, EQUIP.							
63330 Office Equipment, Furniture							
TOTAL (C)							
D. IS EQUIPMENT (DP & TELECOMMUNICATIONS)							
63421 IT/IS Equipment	1	300					
Staff Laptop PC's (R)			2	5,000	2	2,500	5,000
Staff Desktop PC's (R)			1	2,000	1	2,000	2,000
SGI Altix XE Cluster Upgrade (N)	1	281,800	1	118,380			
Supercomputer Replacement Upgrade (R)					1	229,296	229,296
TOTAL (D)		282,100		125,380			236,296
E. EQUIPMENT - LEASE PURCHASE (63460-63476)							
63462 Lease-Purchase - Information Systems Equipment							
63463 Lease-Purchase - Telecom. Infrastructure / Equipment							
63468 Lease-Purchase - Telephone Equipment							
63469 Lease-Purchase - Two-way Radio Equipment							
63476 Lease-Purchase - Other Equipment							
TOTAL (E)							
F. OTHER EQUIPMENT							
63490 Other Equipment							
63396 Betterments or Accessories for Vehicles							
63495 Betterments or Accessories for Other than Vehicles							
TOTAL (F)							
GRAND TOTAL <i>(Enter on Line I-D-2 of Form MBR-1)</i>		282,100		125,380			236,296
FUNDING SUMMARY:							
GENERAL FUNDS		282,100		125,380			236,296
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
TOTAL FUNDS		282,100		125,380			236,296

**SCHEDULE D-3
PASSENGER/WORK VEHICLES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	Vehicle Inventory June 30, 2011	FY Ending June 30, 2011		FY Ending June 30, 2012		FY Ending June 30, 2013	
		No. of Vehicles	Actual Cost	No. of Vehicles	Estimated Cost	No. of Vehicles	Requested Cost
A. PASSENGER & WORK VEHICLES (63310, 63390-63400)							
63310 Automobile, Compact Sedan (AU CS)							
63310 Automobile, Full Size Sedan (AU FS)							
63310 Automobile, Mid Size Sedan (AU MS)							
63310 Automobile, Mid Size Station Wagon (AU MW)							
63310 Automobile Utility (AU UT)							
63390 Truck, Carry-All (TK CA)							
63390 Truck, Compact Pickup (TK CU)							
63390 Truck, Dump Bed (TK DU)							
63390 Truck, Medium Duty 2.5 Ton (TK MD)							
63390 Truck, Mid Size Pickup (TK MU)							
63391 Truck, Heavy Duty 5 Ton (TK HD)							
63391 Truck, Heavy Duty Pickup (TK HU)							
63392 Sport Utility Vehicle (TK SU)							
63393 Van, Cargo (VN CD)							
63393 Van, Full Size (VN FV)							
63393 Van, Mid Size (VN MV)							
63400 Other Vehicles							
TOTAL (A)							
B. BETTERMENTS OR ACCESSORIES FOR VEHICLES (63395)							
63395 Betterments or Accessories for Vehicles							
TOTAL (B)							
GRAND TOTAL <i>(Enter on Line I-D-3 of Form MBR-1)</i>							
FUNDING SUMMARY:							
GENERAL FUNDS							
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
TOTAL FUNDS							

**SCHEDULE D-4
WIRELESS COMMUNICATION DEVICES**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH
Name of Agency

MINOR OBJECT OF EXPENDITURE	Device Inventory	Act FY Ending June 30, 2011		Est FY Ending June 30, 2012		Req FY Ending June 30, 2013	
	June 30, 2011	No. of Devices	Actual Cost	No. of Devices	Estimated Cost	No. of Devices	Requested Cost
A. CELLULAR PHONES (63435)							
63435 Cellular Phones							
Total (A)							
B. PAGERS (63434)							
63434 Pagers, Paging Equipment							
Total (B)							
C. WIRELESS PERSONAL DIGITAL ASSISTANTS (63435)							
63435 Wireless PDAs, Blackberry, etc							
Total (C)							
GRAND TOTAL <i>(Enter on Line 1-D-4 of Form MBR-1)</i>							
FUNDING SUMMARY:							
GENERAL FUNDS							
STATE SUPPORT SPECIAL FUNDS							
FEDERAL FUNDS							
OTHER SPECIAL FUNDS							
TOTAL FUNDS							

**SCHEDULE E
SUBSIDIES, LOANS & GRANT**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

MINOR OBJECT OF EXPENDITURE	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013
A. SCHOOL GRANTS TO COUNTIES & MUNICIPALITIES (64000-64599)			
TOTAL (A)			
B. GRANTS TO I.H.L. & OTHER POLITICAL SUBDIVISIONS (64600-64699)			
TOTAL (B)			
C. GRANTS TO NON-GOVERNMENT INSTNS & INDS (64700-64999)			
TOTAL (C)			
D. DEBT SERVICE & JUDGEMENTS (65000-65399)			
65040 Interest on Lease Purchases			
TOTAL (D)			
E. OTHER (66000-89999)			
Utility Costs	80,240	76,219	92,380
TOTAL (E)	80,240	76,219	92,380
GRAND TOTAL <i>(Enter on Line I-E of Form MBR-1)</i>	80,240	76,219	92,380
FUNDING SUMMARY:			
GENERAL FUNDS	80,240	76,219	92,380
STATE SUPPORT SPECIAL FUNDS			
FEDERAL FUNDS			
OTHER SPECIAL FUNDS			
TOTAL FUNDS	80,240	76,219	92,380

NARRATIVE
2013 BUDGET REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

MCSR Mission

The primary mission of the Mississippi Center for Supercomputing Research (MCSR) is to provide high performance computing (HPC) facilities and services to all of the Mississippi Institutions of Higher Learning (IHLs) in support of academic instruction and research.

Description of MCSR Resources & Services

The MCSR currently supports an SGI Altix 3700 shared memory supercomputer, an SGI Altix XE Multi-core Xeon Linux Cluster, a Web server, a distributed memory Intel P4-based Linux Cluster, network attached data storage devices, and a tape backup system. The supercomputers and clusters host a variety of mathematics scientific, and engineering applications, and sequential and parallel software development environments (MPI, C, C++, FORTRAN 90) for students and researchers. Any student or faculty member at any Mississippi IHL may have access to these systems at no charge for research or instructional use. Staff members provide operational support for these systems, as well as end-user support and training to the faculty and students who use them for research.

Value of MCSR Project to Mississippi

The primary benefit of the MCSR is its payoff in federal research funds; in FY11, the MCSR supported over \$19 in federal grants for every \$1 in the MCSR budget. The centralization of personnel and equipment resources also avoids duplicating these expenses at the individual campus level and gives an equality of access to any individual faculty member at the smaller institutions. A secondary benefit to Mississippi from the MCSR is the presence of a centralized technical staff, which is available to all of the institutions for matters including, but not limited to, high-performance computing. In particular, assistance has been provided to the smaller campuses in meeting many diverse needs: campus network strategic planning and installation, system administration of servers and workstations, e-mail services prior to campus e-mail server installation, and many other needs pertaining to UNIX system administration, e-mail issues, user instruction, and network issues. The institution-neutral position of the MCSR has made possible the winning of national grants, which placed networked personal computer laboratories at both Alcorn State University and Mississippi Valley State University. MCSR has also played a critical role in developing the Ph.D. program in Chemistry and the multidisciplinary Ph.D. program in Environmental Science at Jackson State University; and helped the JSU College of Science, Engineering, and Technology to meet the federal matching funds requirements for several key grants.

The MCSR has made major contributions in recent years to the implementation of advanced networking at many of the state's IHLs. In the last two years, the MCSR provided vital support to the research universities and the Office of the Governor to build or negotiate a 10X increase in inter-institutional network bandwidth, which will facilitate inter-institutional collaboration and allow Mississippi researchers to compete nationally for data-intensive research projects. Furthermore, in the past year the MCSR provided support for Mississippi's efforts to secure an Internet2 access point in Jackson, MS, enabling Mississippi universities to participate in this advanced national optical network on an equal footing with institutions around the nation.

Impact of Reduced or Increased Funding on MCSR

The MCSR has continued during each fiscal year to attempt to enable major hardware upgrades with the general goal of doubling the computing power each year within the existing budget levels. This is necessary to meet Mississippi researchers' demands for more comprehensive studies and greater physical realism in computer models, as they compete against researchers from other states for limited federal grants and contracts. However, the result of 10 straight years of decreasing or flat funding has been a 9-year decline in the competitiveness of supercomputing capacity that MCSR is able to offer to Mississippi researchers, compared to similar centers in other states, and has compromised the ability of the diminished support staff to invest in the emerging technologies (e.g. graphical

NARRATIVE 2013 BUDGET REQUEST

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

processing units) that will make Mississippi computational researchers nationally competitive in the upcoming years. Without a major supercomputer replacement and regular upgrades in ensuing years, and additional support staff and maintenance funds to support existing equipment, the computational scientists at most MS institutions will struggle to compete for research projects and grants, and the MCSR project ROI will decline.

What MCSR is Doing to Leverage Existing Funding While Mitigating Funding Reductions

In FY11, the MCSR was able to use lapsed salary funds from a vacant technical support position to procure a major hardware upgrade; as a result, for this year the MCSR met its annual goal to double computing power available at the Center. Unfortunately, this model for augmenting the equipment budget is not sustainable, and certain services offered by the MCSR (in particular user training services) were degraded by understaffing. The MCSR has accelerated efforts to augment state funding for supercomputing replacements by pursuing federal grants, contracts, and allocations, in collaboration with the research faculty and offices of the IHLs. MCSR is uniquely positioned to facilitate such collaborations, since the Center is institution-neutral, and has a great track record of operating shared equipment with great utilization and broad impact to institutions, researchers and students who are historically underserved by this type of resource. While these types of federal programs provide a possible alternative funding source for MCSR during lean budget years, for these proposals to be competitive, MCSR must demonstrate stable funding that will assure reviewers that sufficient technical staff and infrastructure will be available to support the proposed equipment through and beyond the grant period; MCSR cannot reasonably apply to many of the most attractive of these programs because their often leading-edge nature suggests a support burden that is not compatible with MCSR's current staffing levels, or because they require cost sharing of anywhere from 20 to 50% of total project fund. Therefore, the more state funds MCSR receives, the greater leverage the Center will have to secure additional funding to maximize resources offered to Mississippi faculty and students.

Success in Achieving Goals

The MCSR supported over 4.1M hours of computation and \$14.4 million in research contracts and grants during FY2011, on a budget of \$727,661, for a return on investment of \$19 to \$1, and at a cost of 17 cents per CPU hour.

Demand for supercomputing services continues to rise statewide, with 316 faculty and student research accounts added in the last year alone.

MCSR education, outreach, and collaboration initiatives broadened MCSR's impact statewide. MCSR supported class accounts for 4 courses in Fall 10 and Spring 11. In addition, 88 students and faculty received extra-curricular computational training at MCSR workshops during the year. For the 3rd straight summer, MCSR hosted a computational mini-camp for summer research students of the Summer Institute at Jackson State's Center for Interdisciplinary Nanotoxicity.

In FY2011, MCSR actively collaborated with researchers at MS IHLs in submitting over \$400,000 in federal research grant proposals.

MCSR falls significantly short of annual goals in three measures: the number of researchers trained in our workshops, and two measures related to collaborative grant writing and submission. Efforts in both of these areas were severely hampered by understaffing. MCSR has one full time, permanent position for a supercomputer user consultant or high performance computing specialist; the incumbent would, under ordinary circumstances, devote a great deal of time to both the user training and collaborative grant writing activities of the Center. This position was vacant for most of FY11 (from mid September through the end of the year). The position will be filled early in FY12; with the staff returned to full strength, MCSR expects to meet all annual goals for FY12.

FY2011 Additions to Facilities

**NARRATIVE
2013 BUDGET REQUEST**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

Sequoia, MCSR's SGI Altix XE Cluster, received a 38-node, 456-core upgrade in FY2011, increasing the power of that system by 132% and the overall computing power of MCSR by 132%. This upgrade was paid for by the MCSR's FY11 state allocation, with the original equipment budget for FY11 augmented by significant lapsed salary from a vacant user support position.

Justification for FY2013 Funding Request

Academic Support

The specific request for a FY2013 funding increase includes one Program Decision Unit:

1) Restoration -- This request reflects an increase of \$145,497, which includes \$110,916 for adding CPUs and memory to the SGI Altix XE cluster (Equipment) used by researchers, plus an increase of \$16,161 to cover increased utility costs (Subsidies/Transfers).

Salaries -- This request calls for an increase of \$17,420 in salaries for hiring two additional graduate student assistants for the 11/12 Academic Year. These students will provide expanded technical support, user training, and grant writing capabilities for the MCSR.

Travel -- No additional funds are requested for travel over FY2012 amount.

Contractual Services -- No additional funds are requested for contractual services over FY2012 amount.

Commodities -- This request calls for an increase of \$1,000 over the FY2012 amount for replacing outdated office equipment and user training materials.

**OUT-OF-STATE TRAVEL
FISCAL YEAR 2011**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

Note: All expenditures recorded on this form must be totaled and said total must agree with the out-of-state travel amount indicated for FY 2011 on Form Mbr-1, line I.A.2.b.

Employee's Name	Destination	Purpose	Travel Cost	Funding Source
Hopkins, Brian	Atlanta, GA	Internet2 Fall Member Meeting	1,150	General Fund
Hopkins, Brian	Arlington, VA	Internet2 Spring Member Meeting	2,007	General Fund
Hopkins, Brian	New Orleans, LA	Supercomputing 10 Conference	1,496	General Fund
Roach, David	New Orleans, LA	Supercomputing 10 Conference	2,550	General Fund
Henry, Rachel	New Orleans, LA	Supercomputing 10 Conference	1,977	General Fund
Henry, Rachel	Fremont, CA	SGI User Group Meeting 2011	1,638	General Fund
Hopkins, Brian	Fremont, CA	SGI User Group Meeting 2011	2,177	General Fund
Roach, David	Atlanta, GA	Internet2 Fall Member Meeting	1,110	General Fund
Total Out of State Travel Cost			\$14,105	

FEES, PROFESSIONAL AND OTHER SERVICES
(EXPENDITURE CODES 61600-61699)

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

TYPE OF FEE AND NAME OF VENDOR	Retired w/ PERS	(1) Actual Expenses FY Ending June 30, 2011	(2) Estimated Expenses FY Ending June 30, 2012	(3) Requested for FY Ending June 30, 2013	Fund Num.
61610 Engineering					
TOTAL 61610 Engineering					
61615 SAAS Fees - DFA					
TOTAL 61615 SAAS Fees - DFA					
61616 MMRS Fees					
TOTAL 61616 MMRS Fees					
61620 Department of Audit					
TOTAL 61620 Department of Audit					
6162X Accounting (61621-61624)					
TOTAL 6162X Accounting (61621-61624)					
6163X Legal (61630-61636)					
TOTAL 6163X Legal (61630-61636)					
6164X Medical Services (61640-61646)					
TOTAL 6164X Medical Services (61640-61646)					
61650 State Personnel Board					
TOTAL 61650 State Personnel Board					
6165X Personnel Services Contracts (61651-61653)					
TOTAL 6165X Personnel Services Contracts (61651-61653)					
61658 Personnel Services Contracts - SPAHRS					
TOTAL 61658 Personnel Services Contracts - SPAHRS					
6166X Court Costs & Reporters (61661-61666)					
TOTAL 6166X Court Costs & Reporters (61661-61666)					
61670 Laboratory & Testing Fees					
TOTAL 61670 Laboratory & Testing Fees					
6168X Contract Worker (61682-61688)					
TOTAL 6168X Contract Worker (61682-61688)					
61690 Other Fees & Services					
CONSULTANT SERVICES: EXPANSION OF MCSR / Prep. of CP-1 for IT Equipment RFP <i>Comp. Rate: \$70.51 per hour</i>		416	500	500	General
TOTAL 61690 Other Fees & Services		416	500	500	
GRAND TOTAL (61600-61699)		416	500	500	

VEHICLE PURCHASE DETAILS

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Name of Agency

Year	Model	Person(s) Assigned To	Vehicle Purpose/Use	FY2013 Req. Cost
				0
				<hr/>
				0
			TOTAL VEHICLE REQUEST	0

**VEHICLE INVENTORY
AS OF JUNE 30, 2011**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING _____

Name of Agency

Veh. Type	Vehicle Descript.	Model Year	Model	Person(s) Assigned To	Purpose/Use	Tag Number	Mileage On 6-30-11	Average Miles per Year	Replacement Proposed	
									FY 2012	FY 2013

Vehicle Type = Passenger/Work

**PRIORITY OF DECISION UNITS
FISCAL YEAR 2013**

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Agency Name

Program	Decision Unit	Object	Amount
Priority # 1			
Program # 1 : ACADEMIC SUPPORT	Restoration		
		Salaries	17,420
		Commodities	1,000
		Equipment	110,916
		Subsidies	16,161
		Total	145,497
		General Funds	145,497

CAPITAL LEASES

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING RESEARCH

Name of Agency

Vendor/ Item Leased	Original Date of Lease	Original Number of Months of Lease	Number of Months Remaining on 6-30-11	Last Payment Date	Interest Rate	Amount of Each Monthly/Yearly Payment			Total of Payments to be Made								
						Principal	Interest	Total	Actual FY 2011	Estimated FY 2012			Requested FY 2013				
										Principal	Interest	Total	Principal	Interest	Total		
/	//	0	0	//	.000												

Summary of 3% General Fund Program Reduction to FY2012 Appropriated Funding by Major Object

UM - MISSISSIPPI CENTER FOR SUPERCOMPUTING

Major Object	FY2012 GENERAL FUND REDUCTION	AFFECT ON FY2012 STATE SUPPORT SPECIAL FUNDS	AFFECT ON FY2012 FEDERAL FUNDS	AFFECT ON FY2012 OTHER SPECIAL FUNDS	TOTAL 3% REDUCTIONS
PERSONAL SERVICES					
TRAVEL	(2,000)				(2,000)
CONTRACTUAL SERVICES					
COMMODITIES	(2,000)				(2,000)
OTHER THAN EQUIPMENT					
EQUIPMENT	(14,451)				(14,451)
VEHICLES					
WIRELESS COMM. DEVICES					
SUBSIDIES, LOANS, ETC	(2,287)				(2,287)
TOTALS	(20,738)				(20,738)